

Title (en)
COOLING FLUID COMPOSITION

Title (de)
FLÜSSIGES KÜHLMITTEL

Title (fr)
COMPOSITION DE LIQUIDE DE REFROIDISSEMENT

Publication
EP 1688472 A4 20100707 (EN)

Application
EP 03819062 A 20031126

Priority
JP 0315115 W 20031126

Abstract (en)
[origin: US2006273283A1] The invention relates to a coolant composition which is excellent in hard water stability and has excellent corrosion preventing properties for aluminum and aluminum alloys at high temperatures, and the coolant composition has glycol as a main ingredient and is characterized by comprising (a) 0.01-5% by weight of phosphate; (b) 0.0001-0.1% by weight of strontium compound; and (c) 0.01-0.5% by weight of at least one ingredient selected from the group consisting of polymers and copolymers of C4-C6 unsaturated monoethylene dicarboxylic acid or their salts, polymers and copolymers of C4-C6 unsaturated monoethylene monocarboxylic acid or their salts, and copolymers of the above described C4-C6 unsaturated monoethylene dicarboxylic acid or their salts and C4-C6 unsaturated monoethylene monocarboxylic acid or their salts.

IPC 8 full level
C09K 5/00 (2006.01); **C09K 5/10** (2006.01); **C23F 11/08** (2006.01)

CPC (source: EP US)
C09K 5/10 (2013.01 - EP US); **C23F 11/08** (2013.01 - EP US); **C23F 11/10** (2013.01 - EP US); **C23F 11/173** (2013.01 - EP US); **C23F 11/188** (2013.01 - EP US); **F28F 19/00** (2013.01 - EP US)

Citation (search report)
• [Y] JP 2002294227 A 20021009 - KOMATSU MFG CO LTD, et al
• [Y] US 5766506 A 19980616 - MENDOZA ABEL [US], et al
• [Y] EP 0557761 A1 19930901 - BASF AG [DE]
• [Y] US 5290468 A 19940301 - TURCOTTE DAVID E [US], et al
• See references of WO 2005052086A1

Cited by
FR2906610A1; CN103756649A; WO2022200155A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)
US 2006273283 A1 20061207; AU 2003304569 A1 20050617; CN 1878848 A 20061213; EP 1688472 A1 20060809; EP 1688472 A4 20100707; JP WO2005052086 A1 20070621; WO 2005052086 A1 20050609

DOCDB simple family (application)
US 44155006 A 20060526; AU 2003304569 A 20031126; CN 200380110750 A 20031126; EP 03819062 A 20031126; JP 0315115 W 20031126; JP 2005510910 A 20031126